

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended, is respectfully requested.

Claims 1-12, 14, and 16-27 are pending. Claims 13 and 15 were canceled previously. Claims 1 and 17 are amended. Support for the “anaerobic” feature recited in claim 1 is found in at least previously presented claim 13 and specification page 3, line 5. Support for the spaced adhesive deposits maintaining the distance between the two glass sheets is found in at least previously presented claims 2 and 18. Thus, no new subject matter is added.

In the outstanding Office Action, claims 1-10 and 17-26 are rejected under 35 U.S.C. § 103 as unpatentable over Umeda et al. (U.S. 4,362,771). Claim 11 is rejected under 35 U.S.C. § 103 as unpatentable over Umeda et al. in view of Hararay et al. (U.S. 6,429,961). Claim 16 is rejected under 35 U.S.C. § 103 Umeda et al. and further in view of Hornung et al. (U.S. 6,662,523). Claims 12, 14, and 27 are objected to as being dependent on a base claim, but would be allowable if rewritten in independent form to include the features of the base claim and intervening claims.

At item 2, the Office Action noted a misspelling of the word “aerobic” in claim 1 and accordingly objected to claim 1. Applicants wish to thank the Examiner for noting the misspelling and have amended claim 1 to correct this error. Accordingly, Applicants submit that the objection to claim 1 has been overcome. Applicants further note that claim 17 has also been amended to correct another typographical error by changing “chromatogenic” to “chromogenic”.

Claim 1 recites a glazing panel including two sheets of glass spaced apart from each other and sealed together along their edges. The glazing panel is provided with a plurality of spaced deposits consisting of an adhesive selected from the group consisting of a UV-cured adhesive, an anaerobic cured adhesive and a heat cured adhesive which are arranged between

and in contact with the two sheets of glass and which maintain the distance between the two glass sheets.

The Office Action asserts that Umeda et al. discloses a glazing including two glass sheets 1a, 1b sealed around their periphery having a plurality of spacers 3 with a liquid substance (liquid crystal polymer) between a gap between the sheets. The Office Action further notes that the spacers may be thermosetting, referring to col. 4, lines 34-39 and col. 5, lines 12-25). While acknowledging that Umeda et al. does not teach a spacer distance of 1 to 10 cm as claimed, the Office Action nonetheless asserts that the claimed spacing would have been obvious to a person of ordinary skill in the art in order to maintain the gap between the panes.

Applicants respectfully traverse the rejections based on Umeda et al. At col. 2, lines 15-26, Umeda et al. discloses that the spacers comprise two or more kinds of solids which are of different quality. For example, the two materials may be a polymer solid and an insulating solid. Umeda et al. explains that “[t]he polymer solid is heated and deformed at the time of forming a gap between the substrates, and compressed to a gap determined by the size of the insulating solid.” Col. 2, lines 23-26. Similarly, col. 2, lines 34-63 teaches that the insulating material 2 determines the gap between substrates and the molding while the polymer is compressed, melted, and adheres to the substrates. Thus, for example, Umeda et al. teaches a solution comprising a combination of polymer beads of polyethylene and insulating glass fibers. Col. 3, lines 27-30, 55-56. Thus, Umeda et al. teaches that polymer solid 3 has a size l_p which is a little higher than the size l_g of the insulating material (the insulating material size, not the polymer size, is expressly referred to as the “spacer size”). Col. 4, lines 24-27. Finally, Umeda et al. teaches that an unhardened thermosetting polymer solid may be dispersed in the insulating coating and then heated and hardened in place. Col. 4, lines 34-36. In short, Umeda et al. teaches (1) that the polymer solid 3 or thermosetting polymer solid

adhere to both upper and lower substrates and prevent them from separating from each other and (2) that the insulating material 2 (having a higher softening point and rigidity than the polymer solid) determines the gap between the substrates after molding.

In contrast, both amended independent claims 1 and 17 recite a plurality of spaced deposits “consisting of an adhesive.” In other words, due to the recitation of “consisting of”, the spaced deposits of the presently claimed invention consist of the adhesive and not a second different material such as glass insulating rods. Umeda et al., as discussed above, instead discloses a two part system with a non-adhesive insulating portion. In addition, independent claims 1 and 17 recite that it is the spaced adhesive deposits that maintain gap between the glass sheets. Umeda et al. instead maintains the spacing between the substrates via the insulating material instead of a polymer portion which melts and deforms to the gap size set by the insulating material. Thus, Umeda et al. neither discloses nor suggests the presently claimed invention.

Accordingly, Umeda et al. does not disclose or suggest the features of independent claims 1 and 17. It is submitted that independent claims 1 and 17, and dependent claims 2-11 and 16 and 18-26 which depend on claims 1 and 17, are in condition for allowance.

In separately rejecting claim 11 at item 6, the Office Action further relies on Umeda et al. in view Harary et al. Specifically, the Office Action relies on Harary et al. as teaching heat cured adhesive dots between the glass sheets to bond the sheets together.

Applicants respectfully traverse the rejection of claim 11. Harary et al. discloses the use of adhesive strips whose purpose is simply to adhere or mount an enhancement to an existing substrate (window) surface. Col. 9, lines 34-38. Harary et al. provides examples of such adhesive strips as protected by a release paper and discarded when it is desired to mount the strips on the pane or enhancement. Col. 9, line 64 to col. 10, line 2. Harary et al. first discloses maintaining a relatively uniform gap between the window and the enhancement by

having a relatively rigid enhancement. Col. 10, lines 18-19. Alternatively, Harary et al. discloses maintaining a relatively uniform gap by use of projecting spacer members that may be made of plastic or glass (col. 10, lines 27-42) or a laminate (col. 10, lines 42-50).

In contrast, independent claims 1 and 17 recite a spacer consisting of an adhesive selected from the group consisting of a UV-cured adhesive, anaerobic cured adhesive, or heat cured adhesive. This is different from the spacers in both Umeda et al. which are two formed of two different materials and the spacers of Hararay et al. where the spacers are due to the rigidity of the enhancement being added to the glass, small projections being beads, or a laminate. As noted, the placement of the adhesive strips in Harary et al. is not critical and the purpose is simply to retain the enhancement in place. Thus, Harary et al. does not overcome the deficiencies in Umeda et al. and neither reference discloses or suggests the adhesive spacers recited in independent claims 1 and 17. Thus, claim 17 is patentable over Umeda et al. and Harary et al.

The Office Action also separately rejects claim 16 over Umedat et al. in view of Hornung et al. Specifically, the Office Action relies on Hornung et al. as disclosing an adhesive that seals or bonds glass sheets where the adhesive is heat or UV curable.

Applicants respectfully traverse this separate rejection of claim 16. Hornung et al. discloses a window sash. The spacing and mounting structure separating the glass sheets can be formed of various materials. Notably, the adhesive is used around the periphery of the structure (col. 2, lines 45-50) and the spacing is reinforced with ribs (col. 4, line 59 to col. 5, line 3). Accordingly, Umeda et al. in combination with Hornung et al. do not suggest spaced adhesive deposits consisting of adhesive for maintaining the space between the substrates as presently recited in independent claims 1 and 17.

Finally, Applicants acknowledge with gratitude the indication of allowable subject matter in claims 12, 14, and 27. However, Applicants are not presently prepared to amend

these claims to include the features from the base claims and intervening claims on which these claims depend.

For the reasons discussed above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance for claims 1-12, 14, and 16-27 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

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